

National Tsunami Hazard Mitigation Program (NTHMP)

FY 2005 DART BUOY NETWORK BUDGET PLAN

June 1, 2005 - Status update

OPERATION and MAINTENANCE of DART BUOYS

OPERATIONAL MANAGER: Kathleen C. O'Neil (NDBC)

DESCRIPTION:

Maintain the Deep-ocean Assessment and Reporting of Tsunamis (DART) Network in a high state of operation.

PLANS/MILESTONES:

- Operate and Maintain the existing 6 DART stations
 - **DART network at 100% data availability**
 - Acquisition of repair parts, consumables, and spares ongoing
 - Attempted service 46402 Nov 04 unsuccessful
 - Attempted service 46404 Jan 05 unsuccessful
 - Repairs accomplished for 46404 (Feb 05), and 46401 and 46402 (April 05)
 - Planning Aug 05 service visit 46403 and 46405 – commercial vessel
 - NOAA funds made available (300K) for an estimated 15 day cruise
 - Planning Aug 05 service visit 46405 – NOAA ship
- Process and display DART data with additional data products
 - Test and implement de-tiding algorithm for DART data
 - Post DART station performance statistics, raw data, “housekeeping data”
 - No progress, to date for DART 1 data
- Maintain documentation of DART systems
 - **DART 1 test procedures for components, systems complete**
- Evaluate impact of transitioning the prototype DART system with bi-directional data communications into operational DART network.
 - **Bi-directional comms system nearly complete.**
 - **Prototype DART 2 (Kona, HI) iridium communications and data being evaluated.**
- Continue DART system R&D effort with Pacific Marine Environmental Laboratory (PMEL), including improving bi-directional systems.
 - **Transition of DART 2 system from PMEL to NDBC ongoing. Component and systems documentation drafted.**
 - **Development of operational 2-way communications systems nearly complete.**
- Explore the feasibility of combining DART and traditional NDBC buoy requirements on a single platform.
 - **Engineering study to begin later this year**

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O&M DART NETWORK BASE FUNDING (existing 6-station network) : **\$940K received**

To date: \$681.6

(Task order to SAIC) to for O&M DART stations(thru 6/30)	\$221.4K
Shipping of equipment	\$ 64.2K
Port Services, deployment equipment, equipment storage	\$ 43.9K
Ship time/contracts (partial funding from other sources)	\$ 121.5K
Replacement Equipment, Equipment Repairs, Consumable parts	\$218 K
Travel	\$ 12.6K

Planned expenditures: June 1 – Sept 30: \$260K

(Task order to SAIC) to for O&M DART stations (7/1-9/30)	\$ 50K
Shipping of equipment	\$ 70K
Parts and equipment	\$ 30K
Argos fees	\$ 30K
Ship Time for 46403, 46405 cruise August	\$ 75K
Travel	\$ 5K

ENHANCEMENTS : **\$448.4K received**

Spent to date: \$326.7K

Complete prototype Next-Gen DART - funds transfer to PMEL	\$209K
Engineering (Task order to SAIC) Documentation, specifications, etc	\$ 48.5K
Develop hw/sw bi-directional data comms (Task order to SAIC)	\$ 52K
Iridium and comms hardware and service	\$ 15.3K
Travel	\$1.9K

Planned expenditures: June 1 – Sept 30: \$122K

(Task order to SAIC) to complete DART2 transition	\$ 70K
Misc software and software	\$ 12K
Ship Time for prototype deployment (not yet billed)	\$ 30K
Travel	\$ 10K